

WHAT IS CLAIMED IS:

1. A chip light emitting diode comprising:

a metal pad and a lead spaced away from each other on a printed circuit board;

5 a light emitting chip mounted on the metal pad;

a wire connecting the light emitting chip and the lead; and

a resin package sealing the light emitting chip and at least a part of the metal pad, lead, and the wire, the resin package having at least one curved projecting part.

10 2. A chip light emitting diode as recited in claim 1, wherein the curved projecting part has a cross section which is substantially semicircular, or substantially or partially elliptical or parabolic.

15 3. A chip light emitting diode as recited in claim 1, wherein the curved projecting part has a cross section which is comprised of a plurality of straight lines with an angle formed between adjacent lines.

4. A chip light emitting diode as recited in claim 1, wherein at least one stepped part is formed at an outer edge of the resin package.

20 5. A chip light emitting diode as recited in claim 1, wherein the surface of the resin package has fine striations to scattering light emitted from the light emitting chip.

6. A chip light emitting diode as recited in claim 1, wherein the resin package has one projecting part.

25 7. A chip light emitting diode as recited in claim 1, wherein the resin package has two projecting parts which are spaced away from each other by a predetermined interval,

wherein the predetermined interval ranges from 0.1 to 0.4 times a bottom length of the resin package

8. A fabrication method of a chip light emitting diode, comprising the steps of:
 - mounting a light emitting chip on a metal pad formed on a printed circuit board;
 - connecting the light emitting chip to a lead formed on the printed circuit board;
 - providing the printed circuit board within a mold having a cavity, the cavity corresponding
- 5 to at least one projecting part of the chip light emitting diode; and
- forming a resin package sealing the light emitting chip and at least a part of the metal pad and lead by injecting resin material into the cavity of the mold, the resin package having at least one curved projecting part.